

CLASS SPECIFICATION

SAN DIEGO CITY CIVIL SERVICE COMMISSION

ASSISTANT CHEMIST

DEFINITION:

Under general supervision, to perform journey-level professional organic and inorganic chemical tests, analyses and interpretations on potable water, wastewater, industrial waste, and ocean samples in a State-certified chemical laboratory; and to perform related work.

*** EXAMPLES OF DUTIES:**

- Samples and performs chemical tests and analyses of potable water, wastewater and other substances;
- Determines whether treated sewage effluent meets City, State and Federal guidelines of biochemical oxygen demand, pH, ammonia, suspended solids and cyanide;
- Analyzes potable water to measure levels of plankton and various chemicals;
- Determines suitability of treated wastewater for use in irrigation;
- Analyzes potable water and wastewater to identify heavy metals, herbicides and pesticides and other petrochemical and biochemical pollutants;
- Performs spectrophotometric and emission spectrophotometric analyses;
- Evaluates functions of a treatment facility through monitoring equipment;
- Samples and analyzes industrial discharges for compliance with City, State and Federal standards;
- Performs applied research on water and wastewater treatment methods;
- Operates complex analytical equipment such as microcomputers, gas chromatograph/mass spectrophotometers, gas chromatographs, atomic absorption spectrophotometers, ion chromatographs, gas chromatograph/ infrared spectrophotometers and ultraviolet/visible spectrophotometers;
- Performs dioxin analyses;
- Prepares data and organizes information for reports and evaluations;
- Maintains technical records;
- Prepares samples and performs routine bacteriological tests;
- Conducts tours of laboratories and facilities for the public and professional visitors;
- Enters analytical data into computers;
- Writes and modifies application programs of average complexity for computer systems;
- Assists in training profession and technical staff.

MINIMUM QUALIFICATIONS:

Please note: the minimum qualifications stated below are a guide for determining the education, training, experience, special skills, and/or license which may be required for employment in the class. These are re-evaluated each time the position is opened for recruitment. Please refer to the most recent Job Announcement for updated minimum qualifications.

College graduation with a Bachelor's degree in Chemistry, Physical Chemistry, Analytical Chemistry or a closely related physical science field, **AND** one year of professional level experience in a water, wastewater or environmental chemical laboratory performing instrumental, gravimetric and volumetric analyses and interpretations. Possession of a valid California Class C Driver's License may be required for some positions.

- * **EXAMPLES OF DUTIES** performed by employees in this class. The list may not include all required duties, nor are all listed tasks necessarily performed by everyone in this class.